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June 6, 2000

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Commissioner Susan Ness
Federal Communications Commission
The Portals
445 Twelfth Street, S.W.
Room 8B115
Washington, D.C. 20045

Re: WT Docket No. 99-168

Dear Commissioner Ness:

By letter dated May 25, 2000, I wrote to express my concern with the FCC's upcoming 700 MHz frequency auction and the impact on that auction of the various digital allocations in the Channel 60-69 band. In particular, I focused on the five DTV allocations made by the FCC on Channels 60-69 in the Los Angeles DMA. With my May 25, 2000 letter, I submitted a preliminary engineering study indicating that there may well be channels available for digital allocations in the Los Angeles DMA outside of the 60-69 band.

By this letter, I am forwarding to you a further engineering study of the Los Angeles DMA indicating that of the 10 potential DTV channels identified in the first study, three apparently are not feasible while the remaining seven channels hold out some promise of potential DTV use in the Los Angeles market. The use of some or all of these channels for DTV use in that market would significantly free up the 700 MHz frequency and have a positive impact on the spectrum auction. By copy of this letter, I am forwarding this further engineering study to Bruce Franca of the FCC's Office of Engineering and Technology.

Sincerely,



Lowell W. Paxson

Chairman

Paxson Communications Corporation

Enclosure

cc (w/encl.): Bruce A. Franca

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UNABCD E



du Treil, Lundin & Rackley, Inc.

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MEMORANDUM

Date: May 25, 2000

To: Fred Casebolt (via FedEx)

From: John A. Lundin
Direct Line: (941) 329-6011
e-mail: john@dlr.com

Subject: Los Angeles DTV Search

This memo is a follow up report on the studies you requested for the Los Angeles, California TV market. It concerns digital television (DTV) allotments on channels 60 through 69, and the possibility of finding alternative channels in the channels 2 through 59 band.

As noted previously, the Los Angeles market appears to have been 5 DTV allotments made on channels 60 through 69. DTV operations are either authorized or proposed on these channels. All appear to have transmitter sites located in the Mount Wilson area. These channels 60-69 DTV assignments are:

<u>Station</u>	<u>Channel</u>	<u>Auth.</u>	<u>Transmitting Facilities</u>
KCBS-DT, Los Angeles, CA	DTV-60	Lic.	469 kW-DA, 1087 m
KSCI-DT, Long Beach, CA	DTV-61	CP	148 kW-DA, 948 m
KSCI-DT, Long Beach, CA	DTV-61	App.	256 kW-DA, 950 m
KTTV-DT, Los Angeles, CA	DTV-65	CP	680 kW-DA, 902 m
KTTV-DT, Los Angeles, CA	DTV-65	App.	1000 kW-DA, 902 m
KCOP-DT, Los Angeles, CA	DTV-66	CP	371 kW-DA, 888 m
KRCA-DT, Riverside, CA	DTV-68	CP	200 kW-DA, 922 m

A search of the TV band from channels 2 through 59 was undertaken. Alternative DTV channels were sought regardless of the amount of replication to the respective analog (NTSC) operations. For purposes of the search we have assumed the site proposed by KPXN-DT at Mount Harvard (near Mount Wilson). The previous report identified the channels obviously precluded from possible use. Channels 6, 8, 10, 12, 25, 27, 29, 33, 45 and 55 were identified as requiring further studies using the interference procedures outlined in the FCC's OET-69 Bulletin (1 sq km grid was employed). This memo reports on the studies for these 10 channels.

Channel 6

Channel 6 does not appear feasible as a DTV alternative channel due to station XEWT on analog (NTSC) channel 6 at Tijuana, Mexico and several non-commercial, educational (NCE) FM stations in the Los Angeles market (adjacent in frequency to TV channel 6).

Channel 8

For the assumed antenna HAAT (KPXN-DT's, 903 m), the maximum permissible DTV ERP level is 15.3 kW per Section 73.622(f)(7) of the FCC rules.

The DTV ERP can not exceed about 4 kW toward station KFMB-TV on analog channel 8 at San Diego, California. Station KFMB-TV is located 170 kilometers (106 miles) south-southeast (154 degrees True) from the proposed KPXN-DT site on Mount Harvard.

Something similar to Andrew's ATW-WC directional antenna (DA) pattern appears possible (see Figure 1) with a maximum DTV ERP of 16 kW and antenna HAAT of 903 meters. Figure 2 is a map showing the predicted 36 dBu f(50,90) contour for the assumed channel 8 DTV operation. The estimated population (1990 Census) within the DTV service area after consideration of terrain and interference is 13,482,000 people.

Channel 10

The maximum permitted DTV ERP on channel 10 at the assumed antenna HAAT of 903 meters is 15.3 kW per Section 73.622(f)(7) of the FCC rules.

The DTV ERP can not exceed about 0.3 kW toward the proposed KERO-DT operation on DTV channel 10 at Bakersfield, California. Station KERO-DT is located 146 kilometers (91 miles) north-northwest (341 degrees True) from the proposed KPXN-DT site on Mount Harvard.

The DTV ERP can not exceed about 7 kW toward the construction permit (CP) for station KGTV on analog channel 10 at San Diego, California. Station KGTV is located 170 kilometers (106 miles) south-southeast (154 degrees True) from the proposed KPXN-DT site.

Something similar to a Bogner BVA directional antenna pattern appears possible (see Figure 3) with a maximum DTV ERP of 6 kW and antenna HAAT of 903 meters. Figure 4 is a map showing the predicted 36 dBu f(50,90) contour for the assumed channel 10 DTV operation. The estimated population (1990 Census) within the DTV service area after consideration of terrain and interference is 13,159,000 people.

Channel 12

The maximum permitted DTV ERP on channel 12 at the assumed antenna HAAT of 903 meters is 15.3 kW per Section 73.622(f)(7) of the FCC rules.

The separation to XEWT on analog channel 12 at Tijuana, Mexico is 212 kilometers (132 miles), less than the minimum separation required in the US/Mexico Memorandum of Understanding (MOU) concerning DTV (273 km). Assuming that XEWT can be protected using the procedures outlined in the FCC's OET-69 Bulletin, the channel 12 DTV ERP toward XEWT (140 to 155 degrees True) can not exceed about 0.23 kW.

Something similar to a Dielectric THP-C2 directional antenna pattern appears possible (see Figure 5) with a maximum DTV ERP of 16 kW and antenna HAAT of 903 meters. Figure 6 is a map showing the predicted 36 dBu f(50,90) contour for the assumed channel 12 DTV operation. The estimated population (1990 Census) within the DTV service area after consideration of terrain and interference is 13,299,000 people.

Channel 25

Channel 25 does not appear feasible due to the adjacent channel protection to the DTV allotments for station KVCR-TV on DTV channel 26 at San Bernardino, California and station KADY-TV on DTV channel 24 at Oxnard, California. Station KVCR-TV is located 77 kilometers (48 miles) east-southeast (111 degrees True) of the proposed KPXN-DT site. Station KADY-TV is located 89 kilometers (55 miles) west of the proposed KPXN-DT site. The permissible channel 25 DTV ERP over an arc from about 140 degrees True clockwise to 280 degrees True can not exceed about 2 kW.

Channel 27

Channel 27 does not appear feasible due to the protection required to the DTV allotments for station KEYT-TV on DTV channel 27 at Santa Barbara, California and station KVCR-TV on DTV channel 26 at San Bernardino, California. Station KEYT-TV is located 178 kilometers (110 miles) west (282 degrees True) from the proposed KPXN-DT site. Station KVCR-TV is located 77 kilometers (48 miles) east-southeast (111 degrees True) from the proposed KPXN-DT site. The permissible channel 27 DTV ERP toward KEYT-TV on DTV channel 27 is 0.01 kW (10 Watts) from 250 through 285 degrees True. The permissible channel 27 DTV ERP toward KVCR-TV on DTV channel 26 is 1.5 kW from about 140 degrees True through 285 degrees True.

Channel 29

The maximum permitted DTV ERP on channel 27 at the assumed antenna HAAT of 903 meters is 161.7 kW per Section 73.622(f)(8) of the FCC rules.

Our calculations indicate the channel 29 DTV ERP can be 1000 kW without exceeding the FCC's interference standards. Figure 7 is a map showing the predicted 41 dBu f(50,90) contour for an assumed channel 29 DTV operation (1000 kW-ND, 903 m) at the proposed KPXN-DT site. The estimated population (1990 Census) within the DTV service area after consideration of terrain and interference is 13,718,000 people.

Channel 33

The maximum permitted DTV ERP on channel 33 at the assumed antenna HAAT of 903 meters is 161.7 kW per Section 73.622(f)(8) of the FCC rules.

The channel 33 DTV ERP can not exceed about 20 kW toward station KBAK-TV on DTV channel 33 at Bakersfield, California. Station KBAK-TV is located 146 kilometers (91 miles) north-northwest (341 degrees True) from the proposed KPXN-DT site.

Something similar to an Andrew ALP-WC directional antenna pattern appears possible (see Figure 8) with a maximum DTV ERP of 1000 kW and antenna HAAT of 903 meters. Figure 9 is a map showing the predicted 41 dBu f(50,90) contour for the assumed channel 33 DTV operation. The estimated population (1990 Census) within the DTV service area after consideration of terrain and interference is 13,621,000 people.

Channel 45

The maximum permitted DTV ERP on channel 45 at the assumed antenna HAAT of 903 meters is 161.7 kW per Section 73.622(f)(8) of the FCC rules.

The channel 45 DTV ERP can not exceed about 250 kW toward the proposed channel 44 DTV allotment for station KESQ-TV at Palm Springs, California. Station KESQ-TV is located 152 kilometers (95 miles) east-southeast (114 degrees True) from the proposed KPXN-DT site.

Something similar to the Andrew ALP-OC directional antenna pattern appears possible (see Figure 10) with a maximum DTV ERP of 650 kW and antenna HAAT of 903 meters. Figure 11 is a map showing the predicted 41 dBu f(50,90) contour for the assumed channel 45 DTV operation. The estimated population (1990 Census) within the DTV service area after consideration of terrain and interference is 13,383,000 people.

Channel 55

The maximum permitted DTV ERP on channel 55 at the assumed antenna HAAT of 903 meters is 161.7 kW per Section 73.622(f)(8) of the FCC rules.

The channel 55 DTV ERP can not exceed about 1 kW toward the channel 55 DTV allotment for station KFMB-TV at San Diego, California. Station KFMB-TV is located 170 kilometers (106 miles) south-southeast (154 degrees True) from the proposed KPXN-DT site.

Something similar to the Antenna Concepts AR directional antenna pattern appears possible (see Figure 12) with a maximum DTV ERP of 200 kW and antenna HAAT of 903 meters. Figure 13 is a map showing the predicted 41 dBu f(50,90) contour for the assumed channel 55 DTV operation. The estimated population (1990 Census) within the DTV service area after consideration of terrain and interference is 9,317,000 people.

The FCC's list of low power television (LPTV) stations requesting Class A status was examined for potential impact on the above DTV channels (8, 10, 12, 29, 33, 45 & 55) for possible use in the Los Angeles market. Interference calculations were made using the procedures outlined in the FCC's OET-69 Bulletin. Interference was considered in terms of being caused to the LPTV/Class A stations, as well as interference being received from them. Our calculations indicated no Class A problems with channels 8, 10, 12, 33 and 45.

With respect to channel 29, the assumed DTV operation (1000 kW-ND, 903 m) causes calculated interference to 4399 people (0.32%) within the proposed KNET-LP service area (application for channel 25, Los Angeles, CA). The assumed channel 29 DTV operation causes calculated interference to 1704 people (0.81%) within the proposed KTSB-LP service area (application for channel 29, Santa Barbara, CA). The proposed KTSB-LP operation causes calculated interference to 281,639 people within the assumed channel 29 DTV service area, nearly all of which is new or unique interference (281,024 people or 2.05%). If necessary (ie, no other channel for KTSB-LP), the assumed channel 29 DTV operation should be able to accept this amount of calculated interference.

With respect to channel 55, station K55FI on channel 55 at Palm Desert, California causes calculated interference to 11,687 people within the assumed channel 55 DTV service area. This interference represents about 0.13% of the assumed channel 55 DTV service population, and should be acceptable.

If you have questions or need additional information, please communicate.

dLR:2667.8388
enclosures

FIGURE 1



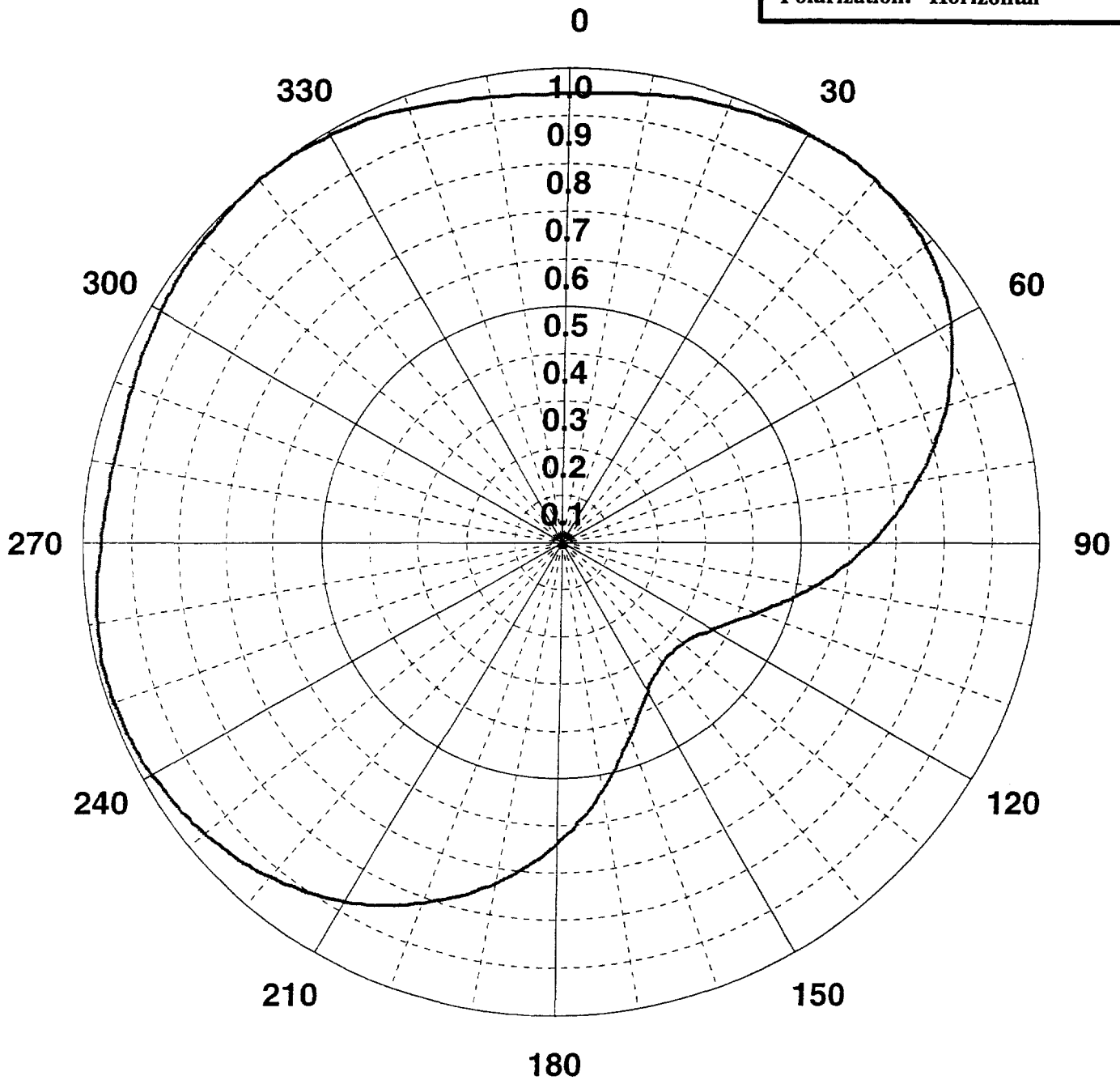
ANDREW

Channel: 8

Type: ATW-WC

Gain: 1.5 (1.76 dB)

Polarization: Horizontal



ANDREW CORPORATION
10500 W. 153rd Street
Orland Park, Illinois U.S.A. 60462

Company:
Site:
Proposal Number:

Date: 5/24/00
Author:

Figure 2

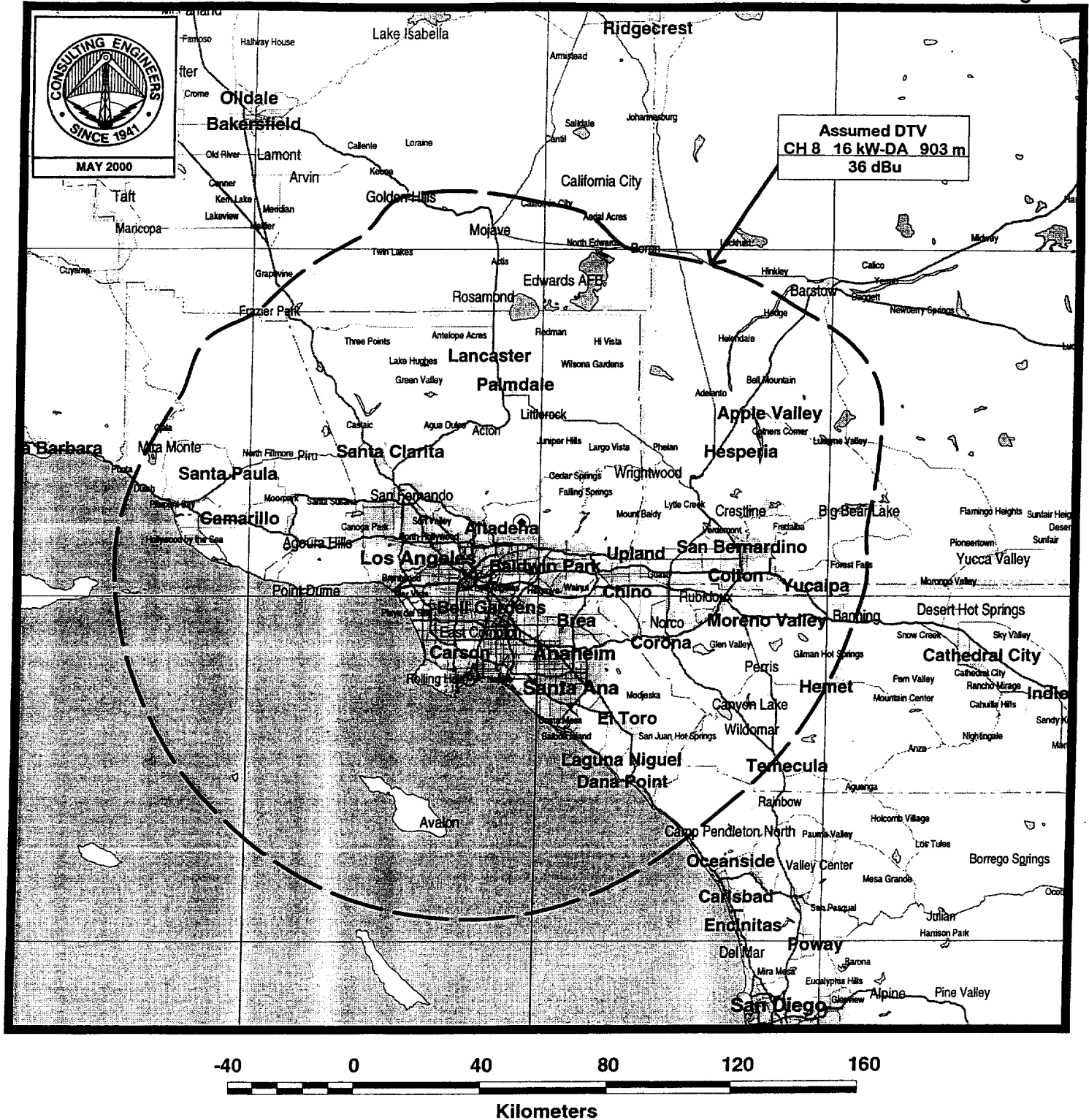


FIGURE 3

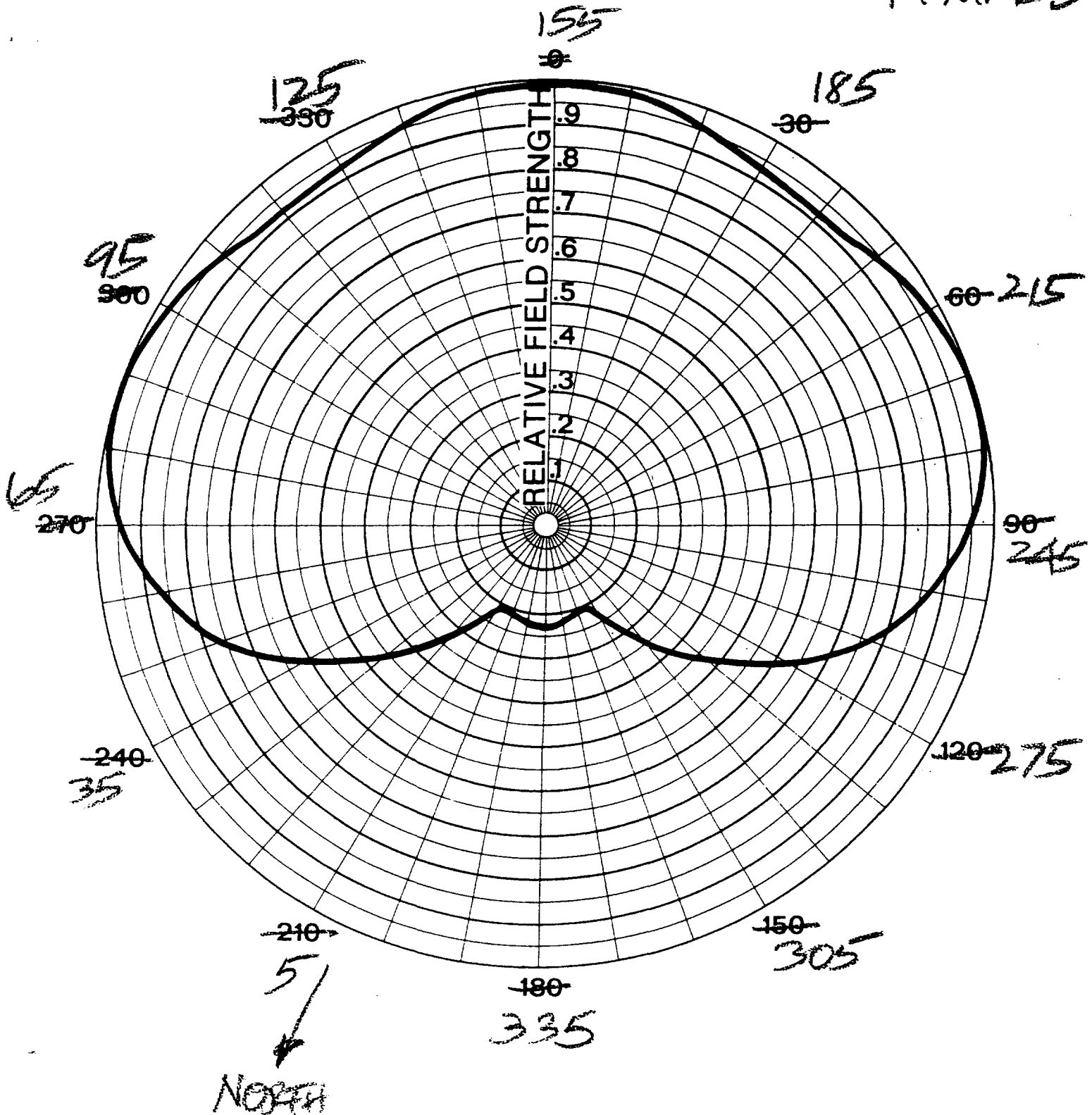
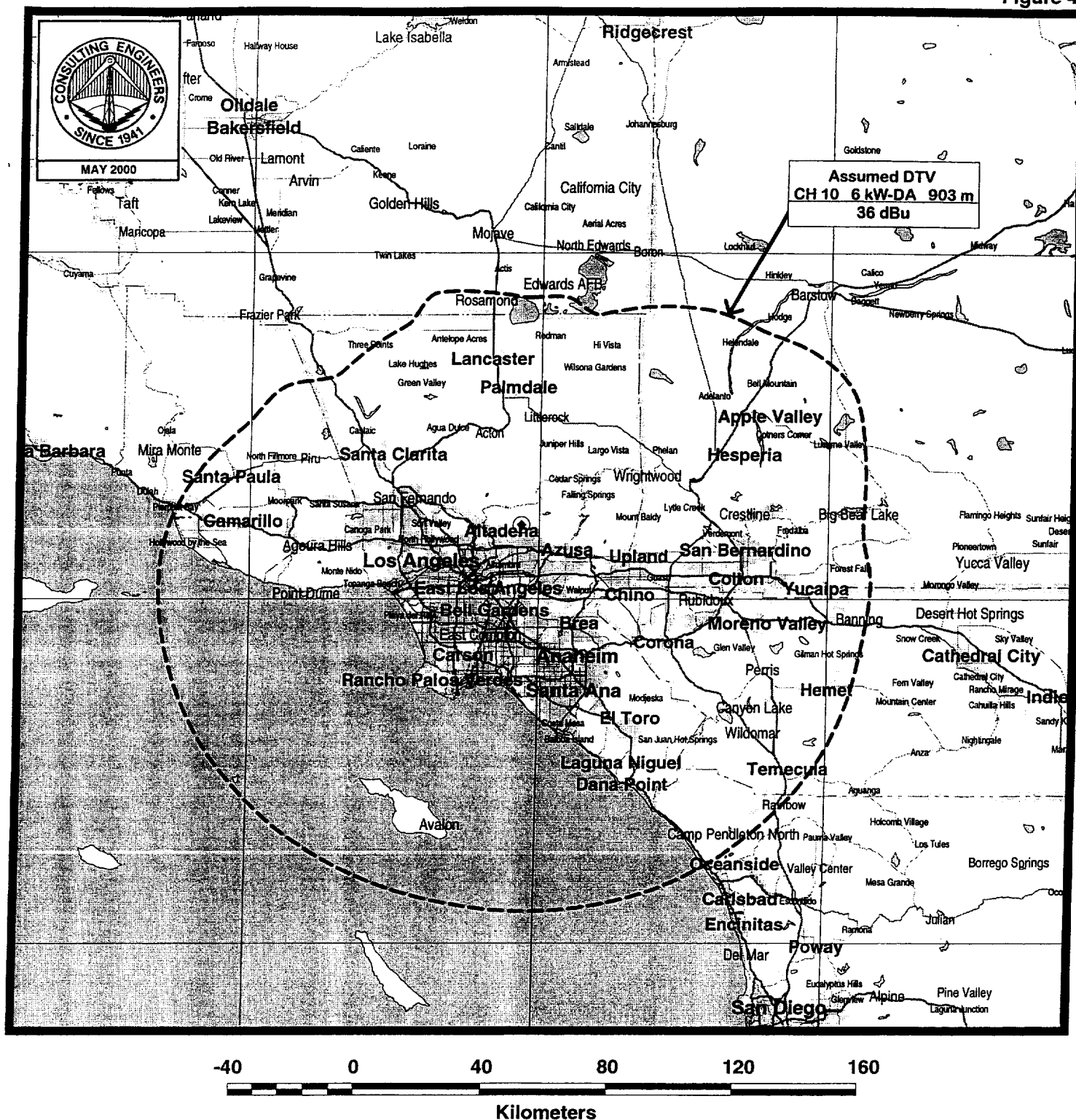


Figure 4



du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Date

24 May 2000

Call Letters

DTV

Channel 12

Location

Los Angeles, CA

Customer

Antenna Type

THP-C2-4-1

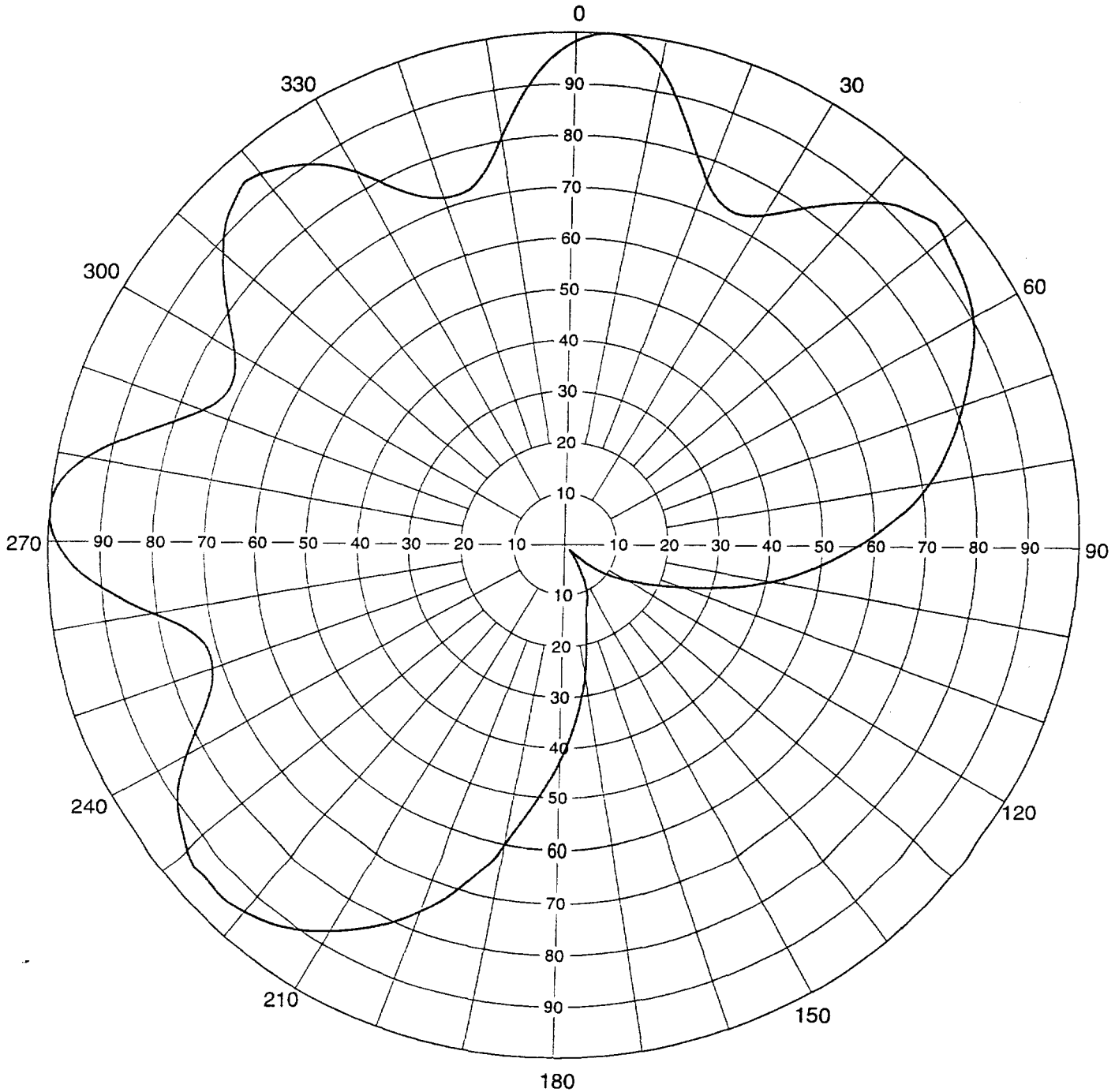
AZIMUTH PATTERN

RMS Gain at Main Lobe
Calculated / Measured

1.80 (2.55 dB)
Calculated

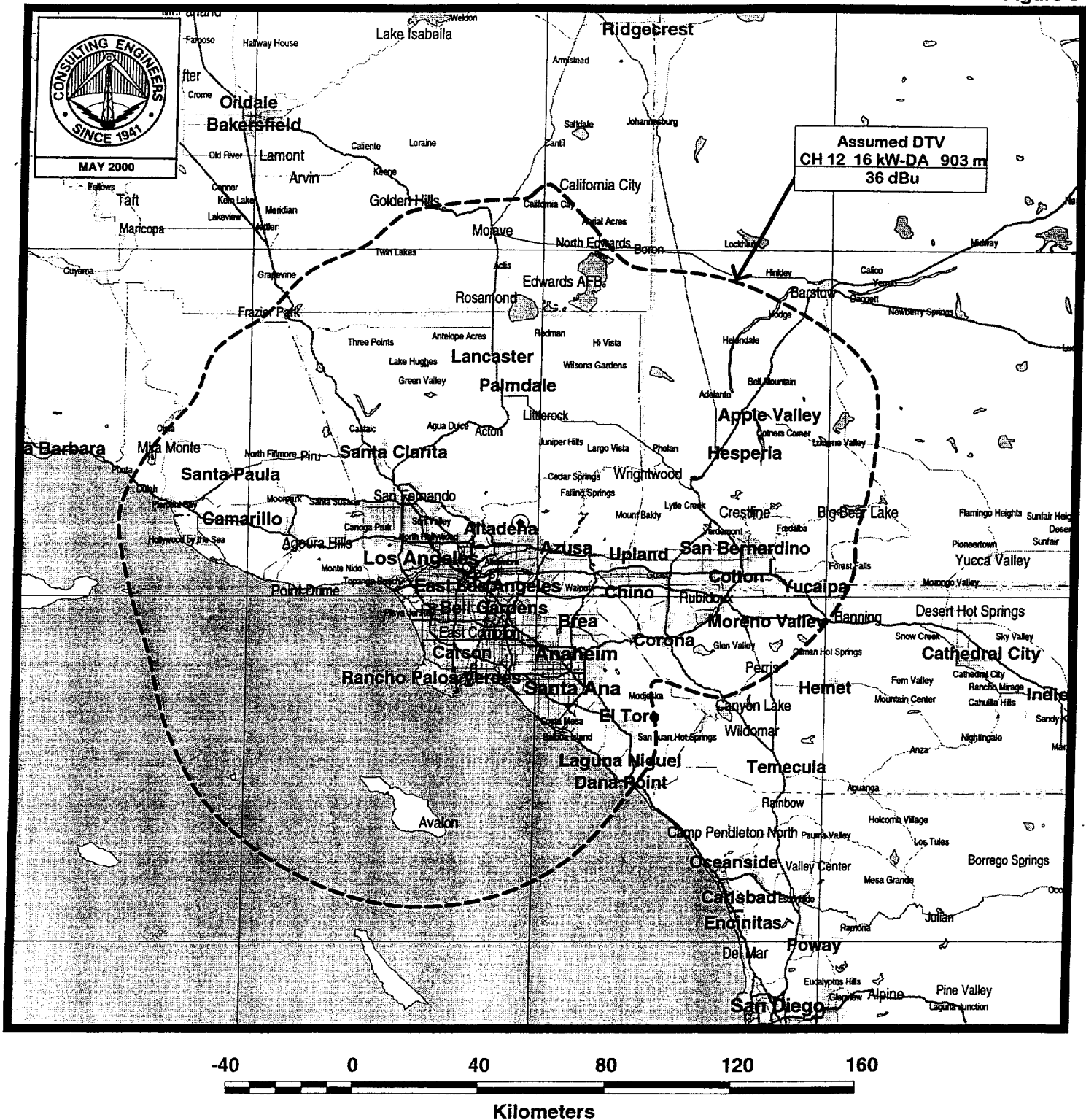
Frequency
Drawing #

207 MHz
THP-C2



Remarks:

Figure 6



COVERAGE CONTOUR
LOS ANGELES, CALIFORNIA
DTV CH 12 16 KW-DA 903 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 7

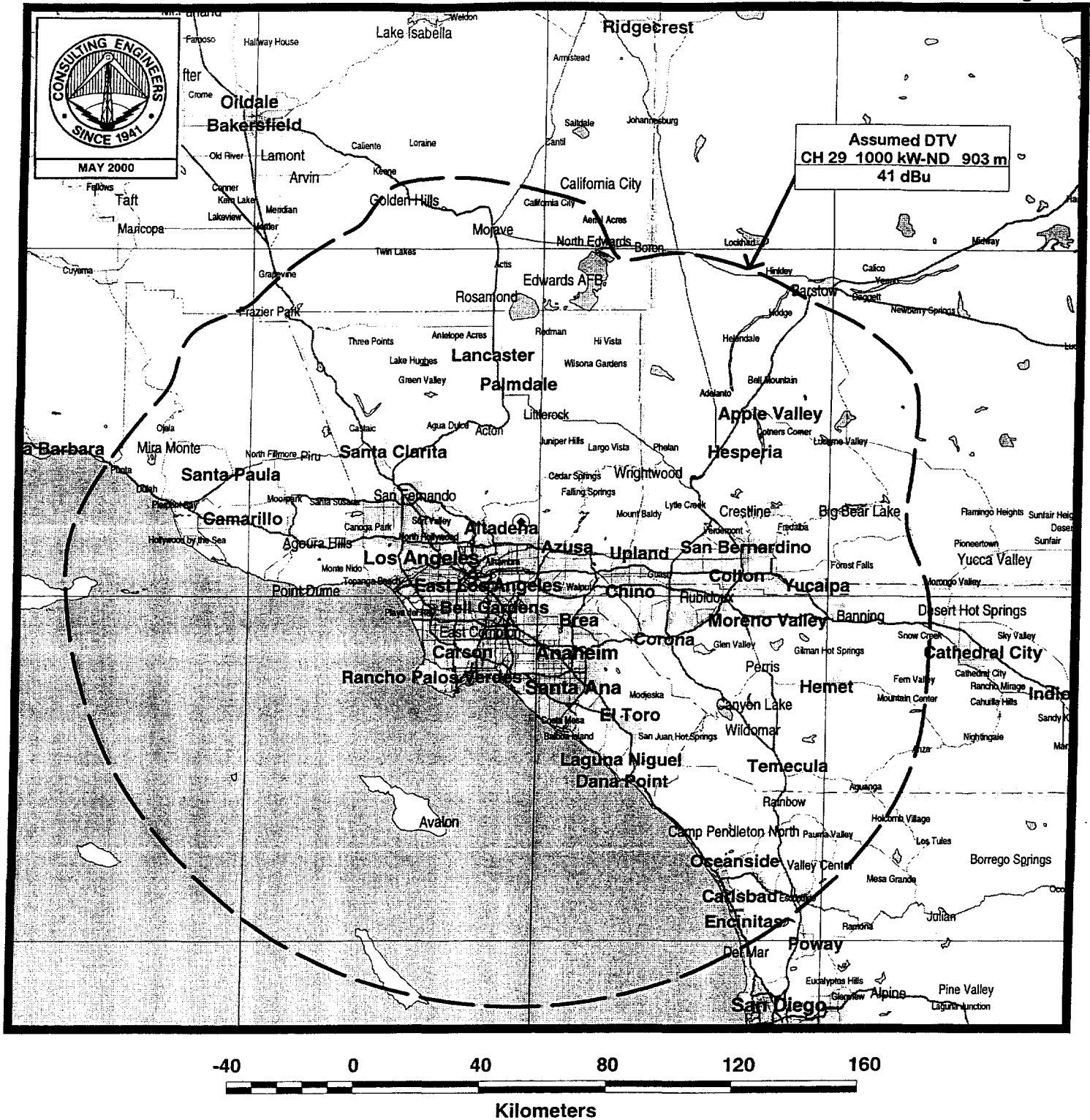


FIGURE 8



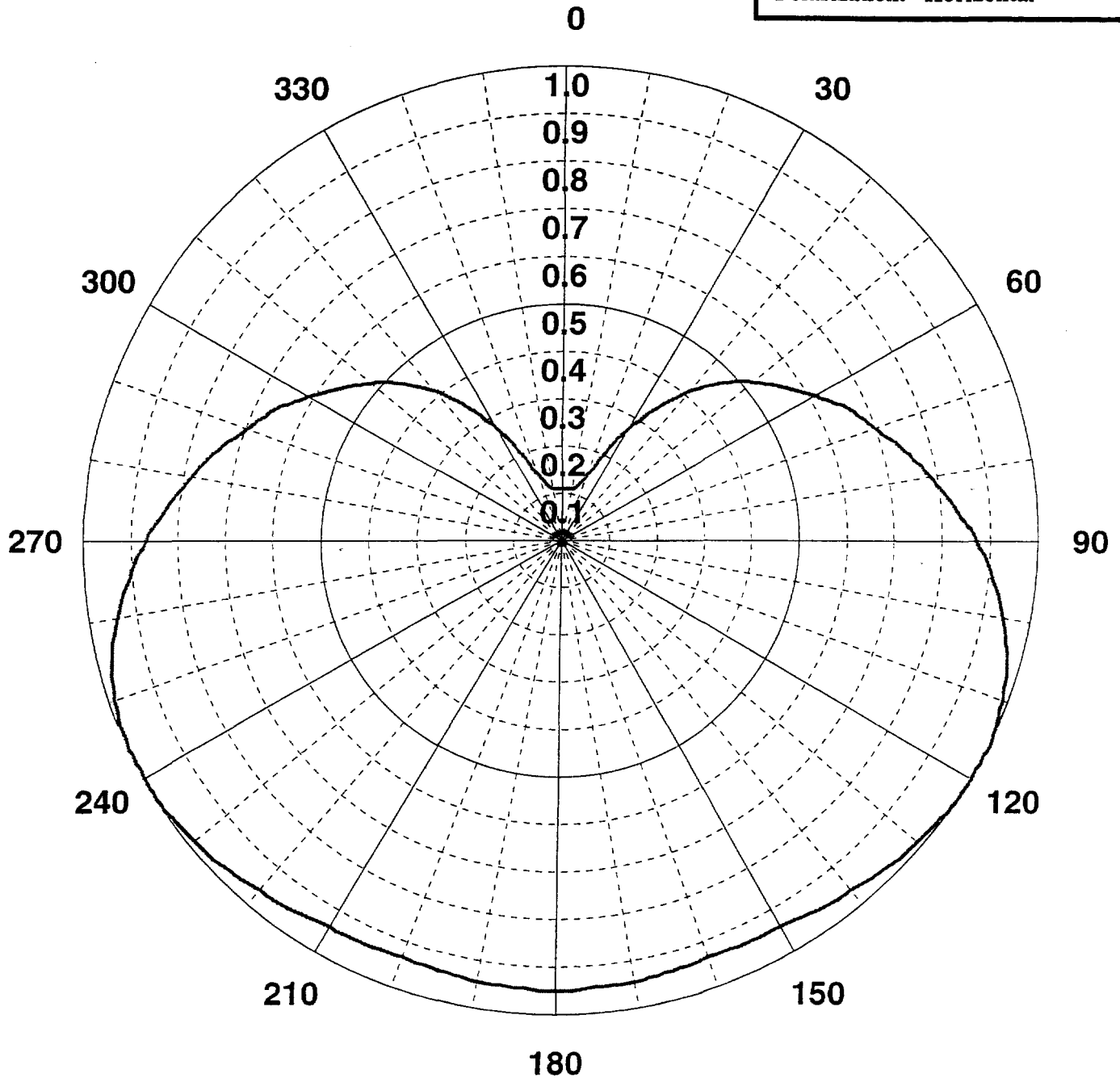
ANDREW

Channel: 33

Type: ALP-WC

Gain: 1.69 (2.28 dB)

Polarization: Horizontal

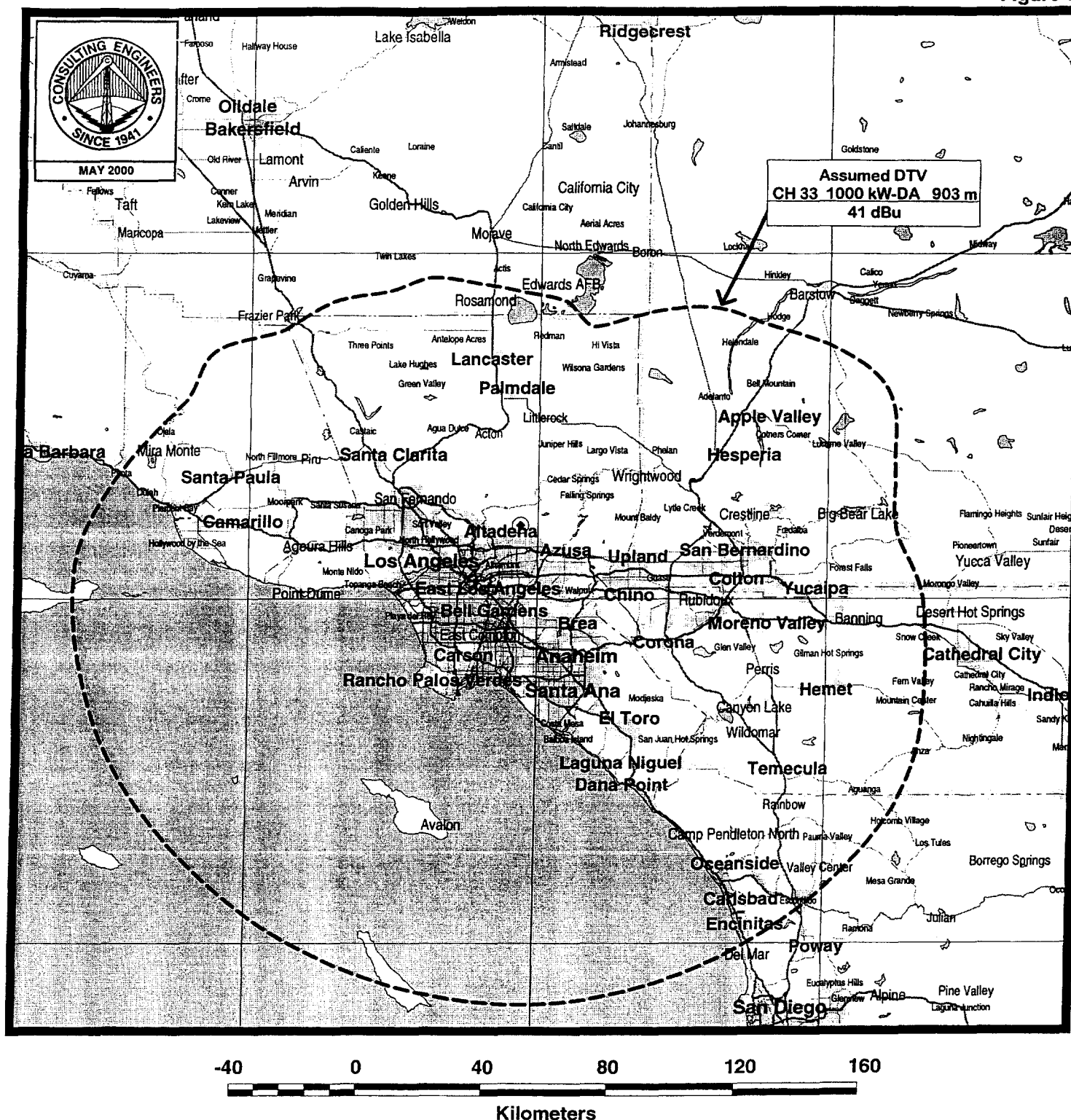


ANDREW CORPORATION
10500 W. 153rd Street
Orland Park, Illinois U.S.A. 60462

Company:
Site:
Proposal Number:

Date: 5/24/00
Author:

Figure 9



COVERAGE CONTOUR

LOS ANGELES, CALIFORNIA
DTV CH 33 1000 KW-DA 903 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

FIGURE 10



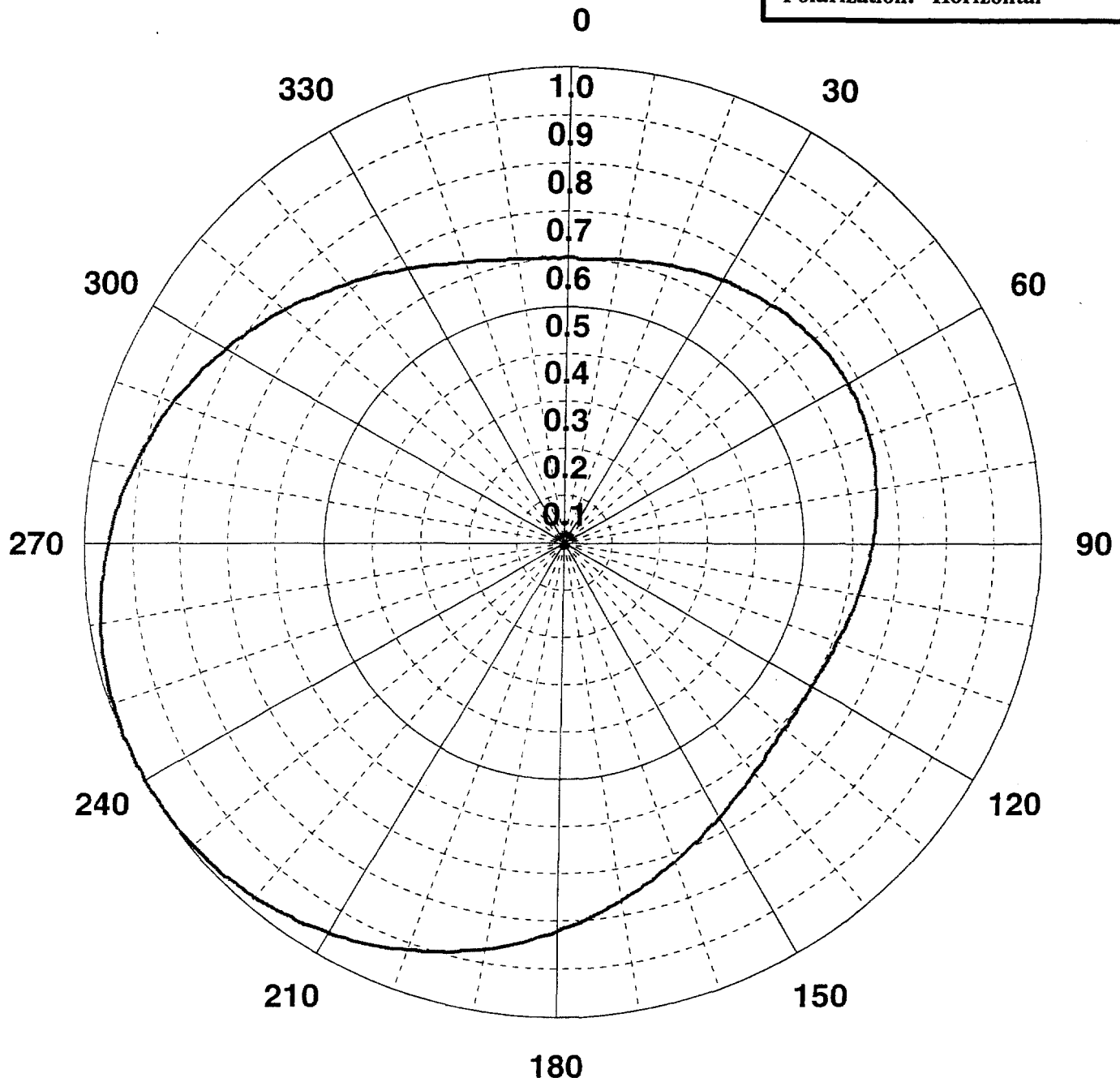
ANDREW

Channel: 45

Type: ALP-OC

Gain: 1.7 (2.3 dB)

Polarization: Horizontal

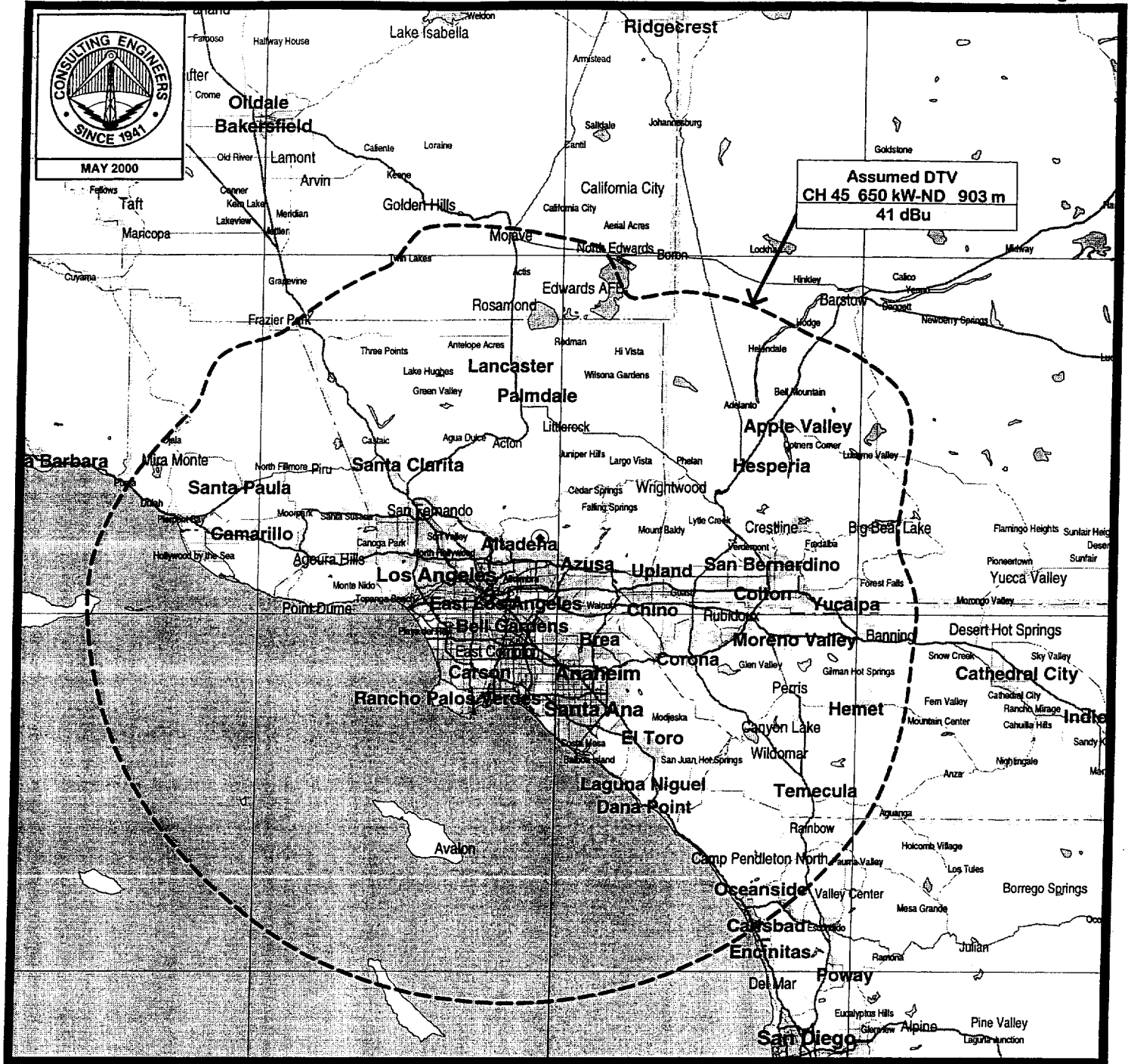


ANDREW CORPORATION
10500 W. 153rd Street
Orland Park, Illinois U.S.A. 60462

Company:
Site:
Proposal Number:

Date: 5/24/00
Author:

Figure 11



COVERAGE CONTOUR
LOS ANGELES, CALIFORNIA
DTV CH 45 650 KW-ND 903 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

FIGURE 12

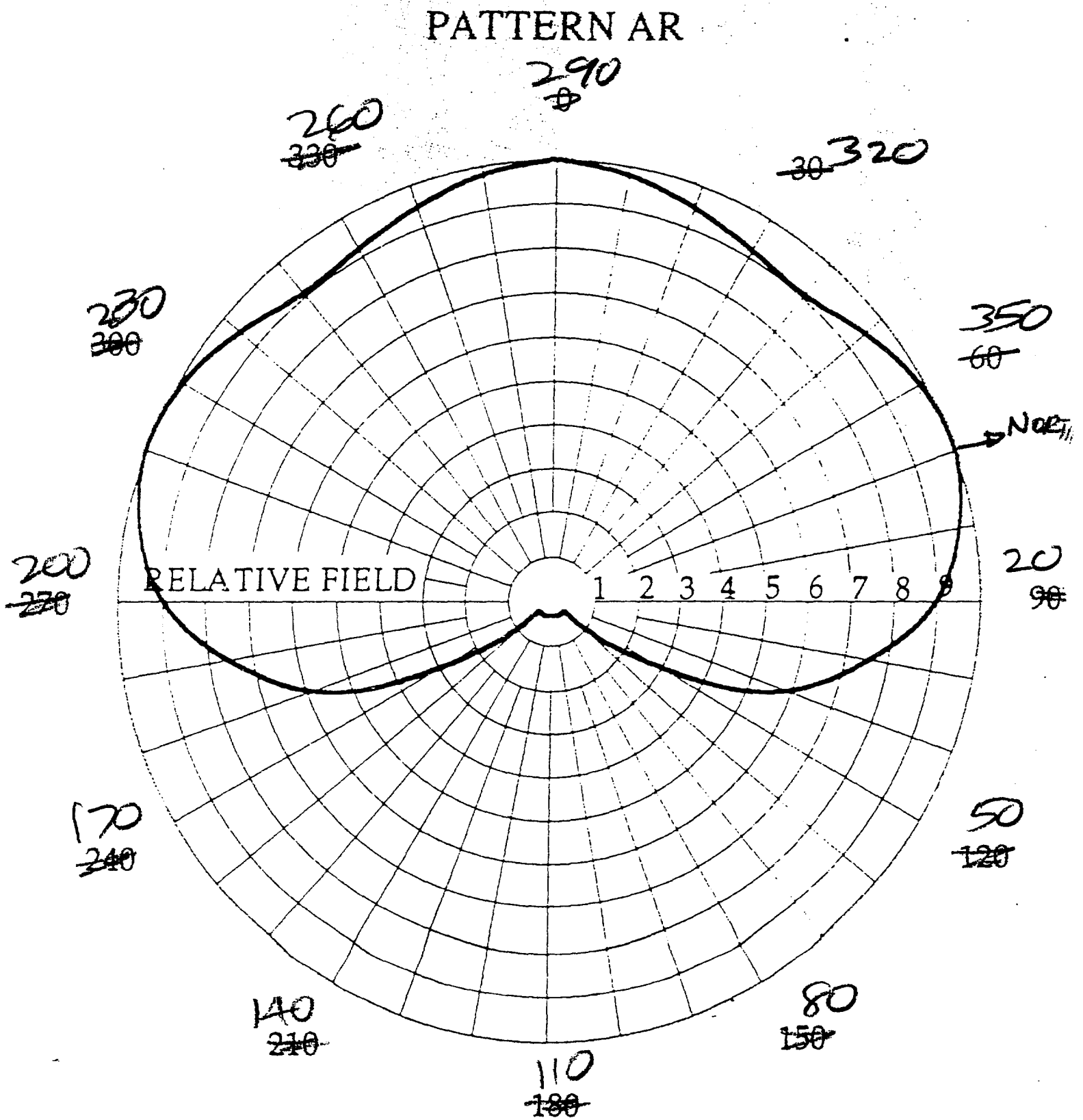
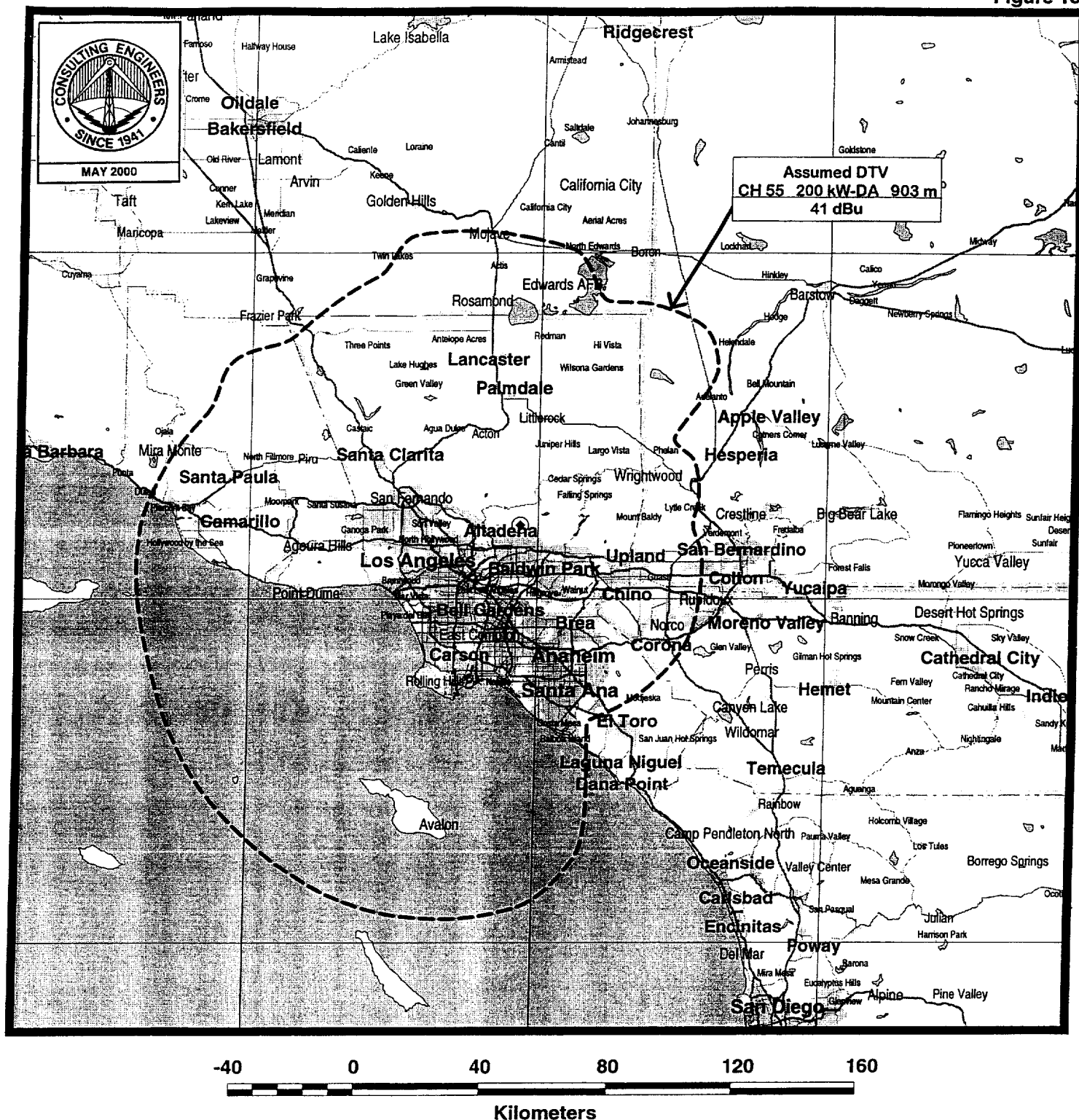


Figure 13



COVERAGE CONTOUR
LOS ANGELES, CALIFORNIA
DTV CH 55 200 KW-DA 903 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida